

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001290**Date Inspected:** 06-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, Cross Beam #2, Lift 3 East, North Tower**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**North Tower Lift #1**

Pre-blast inspection of base metal surfaces on external of tower was performed prior to final abrasive blast for coating application. Base metal surfaces were marked which exhibited gouges, sharp edges, burrs, surface irregularities prior to full SSPC SP-10 blasting completion.

**Lift 3 East**

Final Inspection of upper "U" rib stiffeners and tops of floor beams for scaffold removal was requested by ZPMC. Inspection revealed many non-conforming work areas including holidays, low dry film thickness (DFT) readings and cope holes left uncoated. Also viewed was excessive use of Interzinc 52 for repair areas along the top longitudinal stiffener of the floor beam. An Incident Report was issued for this work previously.

**Lift 3 West**

Inspection request of internal surfaces along the longitudinal diaphragms areas of repair. Arrived at location and ZPMC cancelled inspection.

**North Tower Lift #1**

ZPMC inspection request for Chloride testing of external surfaces Chloride content observed was 10us/cm.

**Cross Beam #2**

Caltrans QA Lumley performed cursory inspection on surfaces coated with Interfine 979, DFT readings were within range specified external surfaces required cleaning and internal surfaces remain in a condition which

---

## SOURCE INSPECTION REPORT

( Continued Page 2 of 2 )

---

requires additional abrasive blasting. ZPMC performed additional abrasive blasting on internals and continued repairs SSPC SP-10 achieved and Interzinc 22 applied to internal and external repair areas.

### Lift 3 East

A verbal request for inspection was given to Caltrans QA Lumley while performing inspection in other areas of trial assembly. Repairs on the Upper termination of the "U" Rib Stiffeners was being performed by ZPMC personnel and an Inspection was carried out with ABF QA/QC Zhou Qusong. The Inspected area exhibited rust and active corrosion developing inside the "U" rib terminations, as well as rust coated over previously, photographs were taken by both parties (ABF & Caltrans) and the work was rejected. No QC from ZPMC was present at the time of inspection. Caltrans QA Lumley filed Incident report for this work.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to why no Notice of Inspections were sent by ZPMC for any work/repairs associated with Lift 3 East.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

---